

Title (en)

EROSION PREVENTIVE METHOD AND MEMBER WITH EROSION PREVENTIVE SECTION

Title (de)

EROSIONSVERHÜTUNGSVERFAHREN UND GLIED MIT EINEM EROSIONSVORHÜTUNGSABSCHNITT

Title (fr)

PROCÉDÉ DE PRÉVENTION DE L'ÉROSION ET ÉLÉMENT AVEC SECTION DE PRÉVENTION DE L'ÉROSION

Publication

**EP 2047939 A4 20101013 (EN)**

Application

**EP 07790323 A 20070802**

Priority

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- JP 2006211496 A 20060802
- JP 2006280711 A 20061013

Abstract (en)

[origin: EP2047939A1] A method is provided, which ensures reliability during manufacture and in the use environment, and allows affording erosion prevention capability in an inexpensive manner, to an erosion-susceptible portion such as turbine rotor blades. An erosion preventive section 4, comprising a lower layer (low-hardness layer) 2 of an austenitic material, and an upper layer (hard layer) 3 of a hard material, such as stellite, harder than the low-hardness layer 2, is formed by laser build-up welding on a portion, which is susceptible to erosion caused by liquid droplets and solid particles in a use environment, of a target member 1 such as a turbine rotor blade. Laser build-up welding is carried out through irradiation of a laser beam from a laser light source 6 while a welding material supply means 5 supplies an austenitic material and a hard material in the form of, for instance, a rod, powder or the like.

IPC 8 full level

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Citation (search report)

- [X] US 2006067830 A1 20060330 - GUO WEN [US], et al
- [XI] EP 1462621 A1 20040929 - EATON CORP [US]
- [A] EP 1643011 A1 20060405 - GEN ELECTRIC [US]
- See references of WO 2008015795A1

Cited by

EP2444190A1; CN103668188A

Designated contracting state (EPC)

AT DE FR

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